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| EXAMINER | |
|---|---|
| JIANG, YONG HANG | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2612 | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/541,653 | BREITFUSS ET AL. | |
| | Examiner | Art Unit | |
| | Yong Hang Jiang | 2612 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *07 July 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 July 2005* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7/7/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Drawings*

1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because none of the boxes in figure 1 are labeled to clearly indicate which element in the device they are representing, the labels in figure 1 are insufficient in detail to clearly represent each and every element in figure 1. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

### *Specification*

2. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

**Arrangement of the Specification**

3. As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.
(b) CROSS-REFERENCE TO RELATED APPLICATIONS.
(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
(d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
(e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
(f) BACKGROUND OF THE INVENTION.
    (1) Field of the Invention.
    (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
(g) BRIEF SUMMARY OF THE INVENTION.

(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
(i) DETAILED DESCRIPTION OF THE INVENTION.
(j) CLAIM OR CLAIMS (commencing on a separate sheet).
(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

***Claim Objections***

4. Claim 2 is objected to because of the following informalities: the use of the acronyms TTF and RTF should be accompanied with the words they are representing. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the words "the at least one other ID communication partner device" is preceded by the words "means of" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

Claims 2-7 depend on claim 1; therefore they suffer the same deficiency.

Regarding claim 4, the word "correlation" is preceded by the words "means of" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

Claim 5 recites the limitation "this signal" in "line 2". There is insufficient antecedent basis for this limitation in the claim; it is unclear which signal the limitation is referring to.

Claim 7 recites the limitation "the communication status" in "line 2". There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 8, the word "means" is preceded by the word(s) "designation" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

Claims 9-12 depend on claim 8, therefore they suffer the same deficiency.

Regarding claim 9, the word "means" is preceded by the word(s) "signal by" on line 3; and the word "means" is preceded by the word(s) "sinusoidal signal by" on line 5 in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the element, as

required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

Regarding claim 11, the limitation "the ID communication partner device" on line 3 rendered the claim indefinite as it is unclear which ID communication partner device the claim is referring to. Appropriate correction is required.

Regarding claim 13, the limitation "the ID communication partner device" on line 2 from the last line rendered the claim indefinite as it is unclear which ID communication partner device the claim is referring to. Appropriate correction is required.

Claims 14-16 depend on claim 13; therefore they suffer the same deficiency.

Regarding claim 14, the word "correlation" is preceded by the words "means of" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Maclellan et al. (US 5,929,779).

Regarding claim 1, Maclellan discloses a method for activating a desired communication mode of an ID communication partner device (via a tag) from a group of possible communication modes, which group comprises at least a first mode (via a rapid data transfer mode where the entire message is transmitted before the next downlink sync burst, See the Abstract and Col. 3, lines 21-35) and a second mode (via a second mode wherein a slower or less time critical transfer of a large quantity of data in a packet format takes place, See the Abstract and 36-56),

Wherein the ID communication partner device (tag) and at least one other ID communication partner device (interrogator) are brought into a communication connection (via interrogator communicating with tag) and

Wherein a carrier signal is output by the at least one other ID communication partner device (via interrogator sending informational signal 200a, See Col. 2, lines 60-64), which carrier signal is received by the ID communication partner device (tag), and

Wherein the carrier signal is repeatedly designated (via designating amplitude modulation as the carrier wave, See Col. 4, lines 1-10) by at least one mode activation signal (a downlink sync signal, See Col. 3, lines 57-67) by the at least one other ID communication partner device (via interrogator automatically determines the correct mode in which to operate in using a sync signal, See Col. 3, lines 57-67), and

Wherein the presence of the mode activation signal is recognized by the ID communication partner device, giving a recognition result signal (via tag responding with a burst of upling information to verify receipt of the information from the interrogator, See Col.3, lines 33-35), and

Wherein, as a function of the recognition result signal, the desired communication mode of the ID communication partner device is activated (via information sent to interrogator, See Col. 3, lines 33-35).

Regarding claim 2, Maclellan discloses a TTF mode (via a rapid data transfer mode where the entire message is transmitted before the next downlink sync burst, See the Abstract and Col. 3, lines 21-35) is activated in the ID communication partner device (tag).

Regarding claim 3, Maclellan inherently discloses one mode activation signal is formed by a sinusoidal signal (electromagnetic radiation are sinusoidal inherently) and the carrier signal is designed by a modulation (via amplitude modulation) using the at least one sinusoidal signal (See Col. 4, lines 1-10).

Regarding claim 4, Maclellan discloses the mode activation signal is recognized by a demodulation by correlation (via detector/modulator 302 demodulating the signal directly to baseband, See Col. 4, lines 11-31).

Regarding claim 5, Maclellan discloses the mode activation signal is recognized by filtering out a signal (via demodulating the modulated signal from the interrogator 103 with detector/modulator 302, See Col. 4, lines 11-31).

Regarding claim 6, Maclellan discloses the carrier signal is designated only at predefined time intervals (via interrogator transmits the downlink sync signal at regular intervals, See Col. 3, lines 63-67).

Regarding claim 7, Maclellan discloses a recognition of a communication status is carried out (via tag responding with a burst of upling information to verify receipt of

the information from the interrogator, See Col.3, lines 33-35) and wherein the repeated designation of the carrier signal (designating amplitude modulation as the carrier wave) by the mode activation signal is carried out as a function of the communication status (via downlink sync signal sent out from interrogator to tag in amplitude modulation, See Col. 3, lines 63-67 and Col. 4, lines 1-10).

Regarding claim 8, Maclellan discloses an integrated circuit (see figure 2) for an ID communication partner device (interrogator 103) designed as a communication station, which integrated circuit comprises the following means:

output means (via transmitter antenna 204) for outputting a carrier signal (amplitude modulated signal), which carrier signal can be received by an ID communication partner (tag 105),

and generation means (via radio signal source 201) for generating at least one mode activation signal (via a sync signal, See Col. 3, lines 63-67), and

designation means (via modulator 202), by means of which the carrier signal can be repeatedly designated (via amplitude modulation) by the at least one mode activation signal. (See Col. 3, lines 57-67; Col. 4, lines 1-10; and figure 2)

Regarding claim 9, Maclellan discloses the generation means (radio signal source 201) are designed to form the at least one mode activation signal by means of at least one sinusoidal signal (electromagnetic radiation are sinusoidal inherently), and wherein the designation means (modulator 202) are designed to designate the carrier signal with the at least one sinusoidal signal by means of a modulation (via amplitude modulation) (See col. 4, lines 1-10).

Regarding claim 10, Maclellan discloses the designation means (modulator 202) are designed to designate the carrier signal only at predefined time intervals (via the time interval when the interrogator is communicating with the tag, See Col. 4, lines 1-10).

Regarding claim 11, Maclellan discloses the communication status recognition means (via processor 200) are also provided, by means of which a communication status of the ID communication partner device can be recognized (via sync signal indicating the transfer mode), and wherein the designation means (modulator 202) are designed to repeatedly designate the carrier signal (via amplitude modulation) by the mode activation signal (via sync signal sent from interrogator 103 to tag 105) as a function of the communication status (See Col. 3, lines 57-67; Col. 4, lines 1-10; and figure 2).

Regarding claim 12, Maclellan discloses an ID communication partner device which is designed as a communication station (via interrogator 103) and which is provided with an integrated circuit (see figure 2) as claimed in claim 8.

9. Claims 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Iijima et al. (EP 0513507 B2).

Regarding claim 13, Iijima discloses an integrated circuit (see figure 1) for an ID communication partner device (IC card 1) designed as a data carrier, which integrated circuit comprises the following means:

activation means (via CPU 4) for activating a desired communication mode (protocol A or B) of the ID communication partner device from a group of possible communication modes and

storage means (via mask ROM 2) for storing mode control data of the group of possible communication modes, which group comprises at least a first mode and a second mode,

and reception means (via contact portion 5) for receiving a carrier signal (via a signal containing commands) that is output by an ID communication partner device (external device 7) and is designated with a mode activation signal (via protocol selecting signal), and

recognition means (via CPU 4) for recognizing the presence of the at least one mode activation signal (protocol selecting signal from external device 7, see paragraph 27), by means of which recognition means a recognition result signal can be generated (via "answer to reset" information generated by IC card 1, See paragraph 28), as a function of which recognition result signal the activation of the desired communication mode of the ID communication partner device can be activated by the activation means. (See Paragraphs 14-28 and figures 1-3).

Regarding claim 14, Iijima discloses the recognition means (CPU 4) are designed to carry out the recognition of the presence of the at least one mode activation signal by a demodulation (via communication I/O circuit 6 demodulating signal received from external device 7 and sending the demodulated signal to CPU 4 for processing, See paragraphs 27-29 and figure 1).

Regarding claim 15, Iijima discloses the recognition means (CPU 4) are designed to recognize the presence of the at least one mode activation signal by filtering out this signal (via CPU 4 on IC card 1 recognizing protocol selecting signal from external device 7).

Regarding claim 16, Iijima discloses an ID communication partner device (via IC card 1), which is designed as a data carrier (via IC card 1 containing data), and which is provided with an integrated circuit (See figure 1) as claimed in claim 13. (See Paragraphs 14-28 and figures 1-3).

***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yong Hang Jiang whose telephone number is 571-270-3024. The examiner can normally be reached on M-F 7:30 am to 5:30 pm alternate fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

YHJ

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